COVAL POLISHED CONCRETE SEALER

Technical Data Sheet

www.covaltechnologies.com

Coval Polished Concrete Sealer (PCS), clear, thin-film, protective sealer for Polished Concrete.

I.PRODUCT DESCRIPTION

Coval PCS is a thin film, single component, clear sealer designed to protect highly polished concrete while preserving the polished look and protecting it from surface wear and harsh chemicals. It creates a covalent bond with the concrete substrate and is applied with an acetone pump sprayer and microfiber applicator pad. The concrete slab should be densified prior to the application of PCS. Coval Coatings are UV stable and resist moisture, stains, chloride ion penetration, dirt, ice, acids, bird and animal waste, and graffiti damage to the substrate.

II.RECOMMENDED USES

A. Polished and densified concrete
B. Polished and densified concrete overlay
C. Polished and densified precast concrete products
D. Polymer modified, epoxy, and cementitious terrazzo

III.PRODUCT CHARACTERISTICS

A.PROPERTIES

1. Color: Clear, or clear to slight amber (depending on tempera-ture and humidity)
2. Finish: Clear-Gloss
3. Vehicle Type: Solvent Base
4. Flash Point: Penskey-Martens closed cup 9°C/15°F
5. SG: .83-.85

B.DRY TIME

1. Drying Time is based on 50% RH, @21°F: (PCS is a moisture cured coating and higher humidity will shorten drying time)
2. Touch Dry: 2-4 hours
3. Foot traffic allowed in 4-6 hours, heavy traffic allow 24 hours
4. Forklift Traffic: 24 hours minimum
5. Hot Tire Resistance: 72 hours
6. Dry to Recoat or Burnish: Coval Coatings are designed to give excellent performance with a single coat. If recoating is necessary, wait for a minimum of 2-4 hours. It may take longer due to low humidity.
7. Full Chemical Resistance Cure: 7 days

C. COVERAGE

Coverage will vary depending on the porosity and texture of the substrate, as well as the applicator's method of application. Below are typical coverage rates:

Coverage Rates 1st Coat

Surface	square meters/liter
400 Grit Densified and Polished Concrete	20
800-3000 Grit Densified & Polished Concrete	24
Cementitious Terrazzo	24
Epoxy Terrazzo	29
Polished Overlay	24

****Coverage rates will vary depending on substrate and porosity****
An additional 5-10 sq.meters/L can be achieved on additional coats.

D.TESTING RESULTS

Staining Agent	Resistance Time (h)	Cleaner Required
10% Citric Acid	12	Dry Cloth
Acetone	48+	Dry Cloth
Balsamic Vinegar	12	Dry Cloth
Betadine	6	Wet Cloth
Brake Fluid	48+	Dry Cloth
Coffee/Tea	48+	Dry Cloth
Gasoline	48+	Dry Cloth
Permanent Marker	48+	Solvent
Red Wine	48+	Dry Cloth
Spray Paint	48+	Solvent

E.INDOOR SAFETY

Before application, **1) TURN OFF ALL PILOT LIGHTS OR OPEN FLAMES IN THE BUILDING,**
During application, 2) Always wear safety googles 3) Wear an OSHA approved organic vapor respirator.

IV. APPLICATION INSTRUCTIONS

A.SURFACE PREPARATION

1. **NEWLY POLISHED CONCRETE**
a. Process the concrete to the desired apparency level and that it has been properly densified to rejection.
b. Ensure the floor is toughly cleaned and dried.

2. **PREVIOUSLY POLISHED CONCRETE SWEEP, DUST AND DECONTAMINATE**
IMPORTANT: REMOVE ANY SILICONE
Decontaminate any surface to be coated, removing oils, grease, wax, fatty acids, and other contaminants by using detergents, etching solutions, heavy duty cleaner/degreaser, steam cleaning, or mechanical removal.

3. **Coval PCS** is compatible with densifiers and used after the concrete is placed or polished. Lithium, potassium, sodium silicates and colloidal silica are generally compatible with **Coval PCS**. Clean the surface before application and remove any guards or sealers. DO A TEST AREA in an inconspicuous spot to ensure there is not any issue with the adhesion or curing process.
a. Ensure the polished surface is beading water and has the final permanent look desired.
b. **Coval PCS** is not formulated for application over painted surfaces or epoxy.

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4. TEST AREA

a. When using **Coval PCS** on a new substrate for the first time, clean the area, then test it on a small, inconspicuous area to ensure adhesion and determine that the desired look is achieved. Due to the wide variety of texture and porosity of concrete and masonry surfaces and the various methods of application and environments, different reactions may occur. Once satisfied, work can begin.

b. There will be a slight enhancement or change in appearance from the natural surface when using **Coval PCS**. It will depend on the color of the concrete.

c. If ever in doubt about a coating, TEST it first.

B.GENERAL

1. Coval PCS is applied with an acetone pump sprayer and a 45 cm microfiber applicator pad and applicator.

2. When possible, use a Coval Acetone Sprayer. Only use a **solvent resistant spray system rated for Acetone.**

3. With the Coval sprayer, use a gray full cone tip for smaller/ modulated areas, or use a black full cone tip for wide open areas. You can also use TeeJet gray hollow cone jet tip (TX-VK8) for smaller areas or a TeeJet Brown hollow cone tip (TX-VK10/12) to spray larger areas.

4. Begin by saturating the microfiber pad with Coval PCS over the area where you are starting the installation.

5. Spray an even amount of material across the floor and begin spreading in a circular motion in 90-120 cm rows, left to right across the floor.

6. Use control joints or defined breaks in the floor to maintain a manageable wet-edge (7-9 meters) distance. Long wet edge applications require multiple applicators to install the coating fast enough before it starts to tack up. Always return to the starting position of each row to begin a new row so that it starts at the oldest point. The coating will begin to tack on average in 1-2 minutes, which is plenty of time to work at a relaxed pace over a 7-9 meter wet edge.

   Have product staged across the floor to keep the process moving Quickly refill the sprayer and avoid touching previously sprayed surfaces.

7. If applying outdoors, make certain the ambient temperature is between 4°C and 32°C, and Relative Humidity (RH) is 90% or lower. Check the forecast for low wind and no chance of rain for a minimum of 5 hours after the estimated time of completion of the coating process. Pick the coolest time of day to minimize the concrete surface temperature.

8. Confirm and schedule so that no morning dew, or sprinkler watering occurs 5 hours minimum after application.

9. **BURNISHING: Coval PCS** can be burnished if dry to the touch and as needed to enhance the appearance and smooth the surface. Use a standard natural hair pad if the coat has cured less than 24 hours. Use a diamond impregnated pad designed for polishing after 24 hours.

10. Two coats will enhance the wear and stain resistance of the sealer.

C.CLEAN UP

1. Clean tools and flush equipment with acetone twice (minimum) immediately after application.
2. Remove spray tips and soak in acetone.
   IMPORTANT: Once the coating is dry, the tools will not clean up with any solvent.
3. When cleaning sprayer, pour in 1 L of acetone and secure cap of sprayer, shake vigorously to clean all side walls of tank and pump. Then pressurize tank and spray acetone through to thoroughly rinse hose, wand, and spray tip.
4. Release pressure, remove spray tip from wand and place in cup of acetone.
5. Add another 1 L of acetone to tank and repeat rinsing cycle.
6. When finished, release pressure, open cap, hold wand above tank and release residual acetone from hose and wand.

D.STORAGE

If excess coating remains in a container, Coval recommends the following:

1. Put a nitrogen or argon blanket on the top of the remaining liquid in the container, (Argon gas can be found in small containers, sold as wine preservers on amazon) OR
2. Move the remaining coating to a smaller container with as little air/oxygen in the container as possible. Use only HDPE containers.
3. Store in a cool, dry location. Do not store solvent-based products in the sun, warm storage area, or in a sun-heated vehicle as overly heated products can turn dark in color and remain tinted when applied.
4. Shelf life: 12 months
5. Store in temperature-controlled environment not to exceed 27°F.

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V.CARE AND MAINTENANCE

1. Wipe up spills as soon as possible.
2. Do not use heavy abrasive pads on auto-scrubbers.
3. A soft brush or white buffing pad is sufficient to remove stains from the surface once cured.
4. Neutral pH cleaners, disinfecting cleaners, and de-greasers will not damage the finish and can be used regularly.
5. Remove paint spills or graffiti with rubbing alcohol or acetone and rinse with water.
6. If high traffic areas show wear, clean area with 3M maroon scotch bright pad. Tack floor with acetone keeping the leading edge of the microfiber pad always moving in the same direction. Then apply a fresh coat of PCS.

VI.SAFETY AND ENVIRONMENTAL

1. **INDOORS, TURN OFF AND EXTINGUISH ALL PILOT LIGHTS OR OPEN FLAMES IN THE BUILDING.**
2. Always wear OSHA approved 1910.134 and ANSI Z88 2 respiratory protection.
3. Fresh air and exhaust should be provided in enclosed work areas. If inhaled, remove affected person to fresh air and call physician immediately if physical difficulties occur.
4. Wear butyl-rubber gloves and other skin protection to avoid contact. In the event of contact with skin, wash skin thoroughly with soap and water.
5. Chemical safety goggles or splash shields are required. Do not wear contacts without eye protection. Immediately flush eyes with water for 15 minutes after contact and get medical attention.
6. If accidentally swallowed, rinse mouth thoroughly and obtain immediate medical attention.
7. In enclosed areas, make sure to have an observer watching the applicator for any signs of physical distress.

Please see Coval FAQs for the specific product online at www.covaltechnologies.com.

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